STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft Louisiana Pollutant Discharge Elimination System Permit No. <u>LA0108081</u>; AI 86932; PER20040001 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality

Office of Environmental Services

P. O. Box 4313

Baton Rouge, Louisiana 70821-4313

I. THE APPLICANT IS:

Louisiana Land and Water Company, Inc.

Tanglewood Sewage Treatment Plant

2800 N. 7th Street West Monroe, LA 71291

II. PREPARED BY:

Ronda Burtch

DATE PREPARED:

December 16, 2006

III. PERMIT ACTION:

reissue LPDES permit LA0108081, AI 86932; PER20040001

LPDES application received: May 27, 2004

LPDES permit issued: July 1, 1999 LPDES permit expired: June 30, 2004

IV. FACILITY INFORMATION:

- A. The application is for the discharge of treated sanitary wastewater from an existing privately owned treatment works serving the Tanglewood Estates Subdivision.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located at 201 Dellwood Drive in Monroe, Ouachita Parish.
- D. The treatment facility consists of a two-cell oxidation pond with a rock filter. Disinfection is by chlorination.

E. Outfall 001

Discharge Location:

Latitude 32° 27' 25" North

Longitude 92° 03' 58" West

Description:

treated sanitary wastewater

Expected Flow:

368 homes x 400 gallons/day/home = 0.1472 MGD

Calculations for gallons per day were based upon figures obtained from Chapter 15 of the State of Louisiana Sanitary Code, Department of Health and Hospitals, Office of Public Health.

Type of Flow Measurement which the facility is currently using:

Bucket and Stopwatch (A condition of the permit is that the flow from the facility be measured continuously. Therefore, a continuous recorder will be required at this facility).

V. RECEIVING WATERS:

The discharge is into Raccoon Bayou, thence into Petticoat Bayou, thence into Bayou Lafourche in segment 080904 of the Ouachita River Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 080904 of the Ouachita River Basin are as indicated in the table below^{1/2}:

Overall Degree of Support for Segment 080904		a a de la companya d					
Partial	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Full	Full	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 080904 of the Ouachita River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 1998 Water Quality Management Plan, Volume 5, Part B, Water Quality Inventory, respectively.

VI. <u>ENDANGERED SPECIES:</u>

The receiving waterbody, Subsegment 080904 of the Ouachita River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. <u>HISTORIC SITES:</u>

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Ronda Burtch
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 080904, Bayou Lafourche – Near Oakridge to Boeuf River near Columbia, is not listed on LDEQ's Final 2004 303(d) List as impaired. However, subsegment 080904 was previously listed as impaired for organic enrichment/low DO, priority organics (including Dioxins), nutrients, suspended solids/turbidity, and phosphorus, for which the below TMDLs have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving waterbodies based upon additional TMDLs and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDLs have been established for subsegment 080904:

TMDL for TSS, Turbidity, and Siltation for 13 Subsegments in the Ouachita River Basin

As per the TMDL, "Point sources do not represent a significant source of TSS as defined in this TMDL. Because an enforceable mechanism is in place to protect from discharges of organic suspended solids no TMDL is required for these materials." Therefore, TSS limits will remain as previously permitted.

Ouachita River Basin TMDLs for Dioxin

Per the Ouachita River Basin TMDLs for Dioxin, the only identified point source of Dioxin is from IP's Louisiana Mill. Therefore, no limitations for priority organics (including Dioxin) will be placed in the permit.

Bayou Lafourche TMDLs for Dissolved Oxygen and Nutrients

Per the TMDL, "In order to maintain the DO standard of 5.0 mg/L throughout the subsegment, nonpoint source loads will need to be reduced 81%, and treatment upgrades will be required for some of the point sources. This facility was included in the TMDL model and was given point source concentrations necessary to meet the 5.0 mg/L DO standard. Therefore, the parameter concentrations necessary to meet the DO limit for this point source is 5.0 mg/L DO, 10 mg/L BOD $_5$, 5 mg/L ammonia nitrogen, and 2.5 mg/L organic nitrogen. The limits for organic nitrogen and ammonia nitrogen will be added together for Total Kjeldahl Nitrogen (TKN). Therefore, limits for BOD $_5$ will remain as previously permitted and limits for DO and TKN will be established in the permit.

Interim 1 Effluent Limits:

OUTFALL 001

Interim 1 Effluent Limits are included in order to give the permittee sufficient time to upgrade to a continuous recorder device to monitor flow. Interim 1 Effluent Limits shall become effective on the effective date of the permit and expire one year from the effective date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD₅	N/A	10 mg/l	15 mg/l	Limits are set in accordance with the Bayou Lafourche TMDLs for Dissolved Oxygen and Nutrients.
TSS	N/A	15 mg/l	23 mg/l	The TSS effluent limitations are based on a case-by-case evaluation using Best Professional Judgement for the type of treatment technology utilized at this facility.
TKN	N/A	Report mg/l	Report mg/l	A TKN limitation has been placed in the permit based upon the Bayou Lafourche TMDLs for Dissolved Oxygen and Nutrients. Therefore, "Report" for TKN is being placed into the permit to give the facility time to meet the new limitations.
Dissolved Oxygen	N/A	Report mg/l	N/A*	A DO limitation has been placed in the permit based upon the Bayou Lafourche TMDLs for Dissolved Oxygen and Nutrients. Therefore, "Report" for dissolved oxygen is being placed into the permit to give the facility time to meet the new limitations.

^{*} This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

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2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C).

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

Interim 2 Effluent Limits

OUTFALL 001

This facility will be required to meet Total Kjeldahl Nitrogen (TKN) and DO limitations for the first time. An interim period shall be granted in order to give the facility sufficient time to take the necessary steps required to ensure compliance with the (TKN) and DO limitations.

Interim 2 Effluent Limits shall become effective one year from the effective date of the permit and expire three years from the effective date of the permit.

Effluent Characteristic	Monthly Avg. (Ibs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD₅	12	10 mg/l	15 mg/l	Limits are set in accordance with the Bayou Lafourche TMDLs for Dissolved Oxygen and Nutrients.
TSS	18	15 mg/l	23 mg/l	The TSS effluent limitations are based on a case-by-case evaluation using Best Professional Judgement for the type of treatment technology utilized at this facility.
TKN	Report	Report mg/l	Report mg/l	A TKN limitation has been placed in the permit based upon the Bayou Lafourche TMDLs for Dissolved Oxygen and Nutrients. Therefore, "Report" for TKN is being placed into the permit to give the facility time to meet the new limitations.
Dissolved Oxygen	N/A	Report mg/l	N/A*	A DO limitation has been placed in the permit based upon the Bayou Lafourche TMDLs for Dissolved Oxygen and Nutrients. Therefore, "Report" for dissolved oxygen is being placed into the permit to give the facility time to meet the new limitations.

^{*} This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C).

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

Final Effluent Limits:

OUTFALL 001

Final limits shall become three years from the effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (ibs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD₅	12	10 mg/l	15 mg/l	Limits are set in accordance with the Bayou Lafourche TMDLs for Dissolved Oxygen and Nutrients.
TSS	18	15 mg/l	23 mg/l	The TSS effluent limitations are based on a case-by-case evaluation using Best Professional Judgement for the type of treatment technology utilized at this facility.
TKN	9	7.5 mg/l**	15 mg/l	Limits are set in accordance with the Bayou Lafourche TMDLs for Dissolved Oxygen and Nutrients.
Dissolved Oxygen	N/A	5 mg/l	N/A*	Limits are set in accordance with the Bayou Lafourche TMDLs for Dissolved Oxygen and Nutrients.

- * This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.
- ** The TMDL states that the limits for this facility are 5 mg/l for DO, 10 mg/l for BOD₅, 5.0 mg/l for ammonia- nitrogen, and 2.5 mg/l for organic nitrogen. However, based upon consultation with Emelise Cormier and Dick Duerr of the Department, ammonia-nitrogen and organic nitrogen can be added together for Total Kjeldahl Nitrogen (TKN), resulting in a limit of 7.5 mg/l for TKN.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C).

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0108081:

Issued: July 1, 1999 Expired: June 30, 2004

Interim Effluent Limitations (July 1, 1999 - September 30, 2001)

Effluent Characteristic	Discharge Lim	<u>itations</u>	Monitoring Requirements		
	Daily Avg.	Daily Max.	<u>Measurement</u>	<u>Sample</u>	
			Frequency	<u>Туре</u>	
Flow	Report	Report	1/week	Measure	
BOD ₅	30 mg/l	45 mg/l	1/month	Grab	
TSS	90 mg/l	135 mg/l	1/month	Grab	
Fecal Coliform Colonies	200	400	1/month	Grab	

Final Effluent Limitations (October 1, 2001 – June 30, 2004)

Effluent Characteristic	Discharge Lir	mitat <u>ions</u>	Monitoring Reg	Monitoring Requirements	
	Daily Avg.	Daily Max.	Measurement	<u>Sample</u>	
			Frequency	<u>Type</u>	
Flow	Report	Report	1/week	Measure	
BOD ₅	10 mg/l	15 mg/l	2/month	Grab	
TSS	15 mg/l	23 mg/l	2/month	Grab	
Fecal Coliform Colonies	200	400	2/month	Grab	

XI. <u>ENFORCEMENT AND SURVEILLANCE ACTIONS:</u>

A) Inspections

A review of the files indicates that there are no recent OEC inspections on file for this facility.

B) Compliance and/or Administrative Orders

A review of the files indicates that there have been no recent enforcement actions administered against this facility.

C) DMR Review

A review of the discharge monitoring reports for the period beginning August 1, 2004 through May 31, 2006 has revealed the following violations:

Month	Parameter	DMR Reported Value	Permit Limit
August 2004	TSS, Monthly Avg.	34 mg/l	15 mg/l
	TSS, Weekly Avg.	34 mg/l	23 mg/l
November 2004	TSS, Monthly Avg.	28.50 mg/l	15 mg/l
	TSS, Weekly Avg.	28.50 mg/l	23 mg/l
	BOD ₅ , Monthly Avg.	20.20 mg/l	10 mg/l
	BOD ₅ , Weekly Avg.	20.20 mg/l	15 mg/l
December 2004	BOD ₅ , Monthly Avg.	12.10 mg/l	10 mg/l
April 2005	TSS, Monthly Avg.	62 mg/l	15 mg/l
	TSS, Weekly Avg.	62 mg/l	23 mg/l
May 2005	TSS, Monthly Avg.	18 mg/i	15 mg/l
June 2005	TSS, Monthly Avg.	39.50 mg/l	15 mg/l
	TSS, Weekly Avg.	39.50 mg/l	23 mg/l
	BOD ₅ , Monthly Avg.	20.20 mg/l	10 mg/l
	BOD ₅ , Weekly Avg.	20.20 mg/l	15 mg/i
July 2005	TSS, Monthly Avg.	151.50 mg/l	15 mg/l
,	TSS, Weekly Avg.	151.50 mg/l	23 mg/l
	BOD ₅ , Monthly Avg.	14.80 mg/l	10 mg/l
August 2005	TSS, Monthly Avg.	25.50 mg/l	15 mg/l
•	TSS, Weekly Avg.	25.50 mg/l	23 mg/l
	BOD ₅ , Monthly Avg.	Invalid Test Reported	10 mg/l
	BOD ₅ , Weekly Avg.	Invalid Test Reported	15 mg/l
September 2005	TSS, Monthly Avg.	230.50 mg/l	15 mg/l
•	TSS, Weekly Avg.	230.50 mg/l	23 mg/l
	BOD ₅ , Monthly Avg.	34.16 mg/l	10 mg/l
	BOD ₅ , Weekly Avg.	34.16 mg/l	15 mg/l
December 2005	TSS, Monthly Avg.	81.50 mg/l	15 mg/l
	TSS, Weekly Avg.	81.50 mg/l	23 mg/l
	BOD ₅ , Monthly Avg.	12.02 mg/l	10 mg/l
February 2006	TSS, Monthly Avg.	20 mg/l	15 mg/l
	BOD ₅ , Monthly Avg.	Invalid Test Reported	10 mg/l
	BOD ₅ , Weekly Avg.	Invalid Test Reported	15 mg/l
March 2006	TSS, Monthly Avg.	23.50 mg/l	15 mg/l
	TSS, Weekly Avg.	23.50 mg/l	23 mg/l
	BOD ₅ , Monthly Avg.	24.60 mg/l	10 mg/l
	BOD ₅ , Weekly Avg.	24.60 mg/l	15 mg/l
April 2006	TSS, Monthly Avg.	79 mg/l	15 mg/l
•	TSS, Weekly Avg.	79 mg/l	23 mg/l
	BOD ₅ , Monthly Avg.	14.30 mg/l	10 mg/l

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May 2006	TSS, Monthly Avg.	35 mg/l	15 mg/l
	TSS, Weekly Avg.	35 mg/l	23 mg/l
	BOD ₅ , Monthly Avg.	10.50 mg/l	10 mg/l

 Please note that the DMRs for January – March 2005 were not submitted or were missing from the file. Also, the DMRs are being submitted under the wrong company name. The DMRs should be submitted under Louislana Land and Water Company instead of Utility Data Service.

XII. ADDITIONAL INFORMATION:

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.1472 MGD.

Effluent loadings are calculated using the following example:

CBOD: 8.34 lb/gal x 0.1472 MGD x 10 mg/l = 12 lb/day

The following are the Monitoring Requirements, Sample Types, and Frequency of Sampling required for this facility during the Interim 1 Effluent Limitations period:

Effluent Characteristics	Monitoring Requirements		
	Measurement	<u>Sample</u>	
	Frequency	<u>Type</u>	
Flow	1/week	Measure	
CBOD ₅	2/month	Grab	
Total Suspended Solids	2/month	Grab	
TKN	2/month	Grab	
Fecal Coliform Bacteria	2/month	Grab	
pH	2/month	Grab	

The following are the Monitoring Requirements, Sample Types, and Frequency of Sampling required for this facility during the Interim 2 Effluent Limitations period and the Final Effluent Limitations period:

Effluent Characteristics	Monitoring Rec	uirements
	Measurement	Sample
•	Frequency	<u>Type</u>
Flow	Continuous	Recorder
CBOD₅	2/month	Grab
Total Suspended Solids TKN	2/month	Grab
Dissolved Oxygen		
Fecal Coliform Bacteria pH	2/month 2/month	Grab Grab

The permittee shall achieve compliance with the FINAL EFFLUENT LIMITATIONS and MONITORING REQUIREMENTS as specified in accordance with the following schedule:

ACTIVITY	DATE
Achieve Interim 1 Effluent Limitations and Monitoring Requirements	Effective date of permit
Achieve Interim 2 Effluent Limitations and Monitoring Requirements	One year from the effective date of the permit
Achieve Final Effluent Limitations and Monitoring Requirements	Three years from the effective date of the permit

The above listed activities must be achieved on or before the deadline date. Additionally, the permittee shall submit a progress report outlining the status of all facility improvements on a yearly basis until compliance is achieved.

Within 14 days of completion of the new facility or facility upgrade and/or expansion, the Permittee shall notify the Department of Environmental Quality, Office of Environmental Services in writing that construction has been completed.

The Permittee shall achieve sustained compliance with Final Effluent Limitations.

Where the percent project completion reported is less than would be required to assure completion of necessary upgrades by the required date, the report of progress shall also include an explanation for this delay and proposed remedial actions.

No later than 14 days following a date for a specific action (as opposed to a report of progress), the permittee shall submit a written notice of compliance or noncompliance.

If Louisiana Land and Water Company, Inc. is unable to comply with the above issued Schedule of Compliance, they shall submit an alternative compliance schedule, for consideration by this Office, within the Draft Permit Public Notice Period.

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in this Statement of Basis.

XIV REFERENCES:

Louisiana Water Quality Management Plan, Vol. 8, "Wasteload Allocations and Discharger Inventory," Louisiana Department of Environmental Quality, 1992.

<u>Louisiana Water Quality Management Plan, Vol. 5-B. "Water Quality Inventory"</u>, Louisiana Department of Environmental Quality, 1998.

<u>Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 2004.</u>

<u>Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program"</u>, Louisiana Department of Environmental Quality, 2004.

<u>Low-Flow Characteristics of Louisiana Streams</u>, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

<u>LPDES Permit Application to Discharge Wastewater</u>, LWC Management, Tanglewood Sewage Treatment Plant, May 27, 2004.